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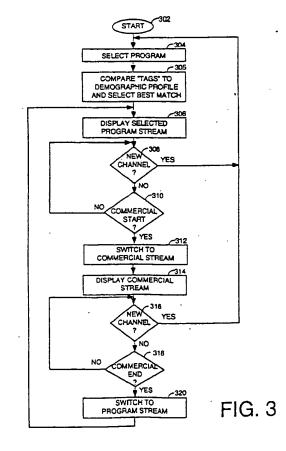
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#### (54) Information distribution system

(57) A method for multiplexing and demultiplexing commercial and program material within the context of, e.g., an MPEG1 or MPEG2 information distribution system. A system employing the method provides either a single terrestrial broadcast channel or a "virtual headend" as part of an uplink site which encodes advertising materials, associates the advertising material with "tags" indicative of demographic or content categorisation affinity, and provides the tagged advertising material, along with program material to one or more information consumers.





#### **EUROPEAN SEARCH REPORT**

Application Number

| 1  | DOCUMENTS CONSIDE  | RED TO BE RELEVANT   |   |  |
|--|--|--|---|--|
| Category                                     | Citation of document with income of relevant passage   | fication, where appropriate,<br>ges  | Relevant<br>to ctaim                          | CLASSIFICATION OF THE APPLICATION (InLCI.6)    |
| D,X<br>Y                                     | WO 97 45965 A (SARNO<br>4 December 1997 (199<br>* abstract *<br>* page 2, line 10 -  | 97-12-04)<br>line 17 *   | 1,14  | H04N7/24                                       |
| X<br>Y                                       | * column 6, line 33<br>* column 7, line 12   | EMAN MICHAEL J)  |   |  |
| Y  | figure 1 *   | AS KEITH ET AL) -03-21) - column 6, line 2; - line 39; figure 17                   | 5,6   |  |
| A  | EP 0 837 609 A (NEX<br>22 April 1998 (1998<br>* abstract; figure<br>* page 7, line 13 -<br>* page 13, line 48<br>* page 15, line 23  | -04-22)<br>4 *<br>line 21 *<br>- page 14, line 5 *                                 | 1,14  | TECHNICAL FIELDS<br>SEARCHED (InLCI.6)<br>HO4N |
| A  | EP 0 822 718 A (DIS<br>4 February 1998 (19<br>* abstract *<br>* page 6, line 6 -<br>* page 11, line 11<br>* page 12, line 15<br>* page 16, line 28<br>* paragraphs [0007]  | line 17 * - line 46 * - line 17 * - line 31 *                                      | 1-15  |  |
|  | The present search report has  | been drawn up for all claims   |   | Exemples                                       |
|  | THE HAGUE  | 14 September 2   | 1   | audet, J                                       |
| X : pa<br>Y : pa<br>dot<br>A : ted<br>O : no | CATEGORY OF CITED DOCUMENTS<br>riscularly relevant if taken alone<br>riscularly relevant if combined with anot<br>sument of the same category<br>shnological background<br>in-written disolosure<br>ermediate document | E : earlier patent<br>after the filing<br>her D : document cit<br>L : document cit | ed in the application<br>ed for other reasons | isshed on, or                                  |

### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 30 4652

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14-09-2000

|             | Patent document<br>and in search repo | rt  | Publication date |  | Patent family<br>member(s)  | Publication date   |
|-------------|---------------------------------------|-----|------------------|--|---|--|
| WO          | 9745965                               | A   | 04-12-1997       | EP<br>WO<br>US   | 0901718 A<br>9746027 A<br>6038000 A   | 17-03-1999<br>04-12-1997<br>14-03-2000   |
| US          | 4602279                               | Α   | 22-07-1986       | NONE   |   |  |
| US          | 5400401                               | A   | 21-03-1995       | AU<br>BR<br>CA<br>EP<br>JP<br>US<br>WO<br>US   | 5575894 A<br>9307339 A<br>2148270 A<br>0682830 A<br>8503823 T<br>5359601 A<br>9410775 A<br>5418782 A  | 24-05-1994<br>01-06-1999<br>11-05-1994<br>22-11-1995<br>23-04-1996<br>25-10-1994<br>11-05-1994<br>23-05-1995   |
| EP          | 0837609                               | Α . | 22-04-1998       | US<br>AU<br>CA<br>JP<br>NO<br>NZ   | 5917830 A<br>4190197 A<br>2218160 A<br>10191325 A<br>974764 A<br>328960 A   | 29-06-1999<br>23-04-1998<br>18-04-1998<br>21-07-1998<br>11-05-1998<br>27-05-1998   |
| 6510d FOUND | 0822718                               | A   | 04-02-1998       | EP<br>AT<br>AT<br>AT<br>AU<br>AU<br>AU<br>AU<br>AU<br>AU<br>AU<br>AU<br>AU<br>AU<br>AU<br>AU<br>AU | 0920208 A<br>177277 T<br>176840 T<br>192005 T<br>190180 T<br>183352 T<br>176841 T<br>715683 B<br>4440797 A<br>712157 B<br>4532597 A<br>693775 B<br>5732994 A<br>692427 B<br>5733094 A<br>691479 B<br>5733194 A<br>692428 B<br>5733294 A<br>5736394 A<br>5845894 A<br>5869894 A<br>716184 B<br>6066798 A | 02-06-1999<br>15-03-1999<br>15-03-1999<br>15-05-2000<br>15-08-1999<br>15-03-1999<br>10-02-2000<br>29-01-1998<br>28-10-1999<br>05-02-1998<br>09-07-1998<br>04-07-1994<br>11-06-1998<br>04-07-1994<br>21-05-1998<br>04-07-1994<br>04-07-1994<br>04-07-1994<br>04-07-1994<br>04-07-1994<br>04-07-1994<br>04-07-1994<br>04-07-1994 |

For more details about this annex: see Official Journal of the European Patent Office, No. 12/82

#### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 30 4652

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-09-2000

| Patent document<br>cited in search report |           | Publication date                        |          | Patent lamily<br>member(s) | Publication date |  |
|---|-----------|---|----------|----------------------------|------------------|--|
| EP 0822718 A                              |           | AU                                      | 716182 B | 24-02-200                  |                  |  |
| 21 0022720                                | • •       |   | AU       | 6066898 A                  | 04-06-199        |  |
|   |           |   | BR       | 9307619 A                  | 15-06-199        |  |
|   |           |   | BR       | 9307620 A                  | 10-08-199        |  |
|   |           |   | BR       | 9307621 A                  | 15-06-199        |  |
| •   | <b></b> . |   | · BR     | 9307622 A                  | 15-06-199        |  |
|   |           |   | BR       | 9307624 A                  |                  |  |
|   |           |   |          | 9307625 A                  | 15-06-199        |  |
|   |           |   | BR       |                            | 31-08-199        |  |
|   |           |   | CA       | 2151456 A                  | 23-06-199        |  |
|   |           |   | CA       | 2151457 A                  | 23-06-199        |  |
|   |           |   | CA       | 2151458 A                  | 23-06-199        |  |
|   |           |   | CA       | 2151459 A                  | 23-06-199        |  |
|   |           |   | CA       | 2151460 A                  | 23-06-199        |  |
|   |           |   | CA       | 2151461 A                  | 09-06-199        |  |
|   |           |   | CA       | 2151462 A                  | 23-06-199        |  |
|   |           |   | CN       | 1259826 A                  | 12-07-200        |  |
|   |           |   | CN       | 1259827 A                  | 12-07-200        |  |
|   |           |   | CN       | 1093211 A                  | 05-10-199        |  |
|   |           |   | CN       | 1090451 A                  | 03-08-199        |  |
|   |           |   | CN       | 1090452 A                  | 03-08-199        |  |
|   |           |   | CN       | 1096151 A                  | 07-12-199        |  |
|   |           |   | CN       | 1090453 A                  | 03-08-199        |  |
|   |           |   | CN       | 1090454 A                  | 03-08-199        |  |
|   |           |   | DE       | 69323560 D                 | 25-03-199        |  |
|   |           |   | DE       | 69323560 T                 | 23-09-199        |  |
|   |           | • |          |                            |                  |  |
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| more details about this an                |           | E-1-1 1                                 | D-1      | Deline No. 1202            |                  |  |